

WHAT IS CLAIMED IS:

1. A storage system comprising:
a plurality of storage physical devices;
means for controlling access to said plurality of storage physical devices;
an interface respectively provided between a host device and said storage physical devices;
setting means for selecting a specific storage physical device from said plurality of storage physical devices, based on predetermined conditions and placing data blocks therein; and
evaluation means for, when access for a data storage request is made from the host device, evaluating whether the request matches the set conditions;
wherein when the result of evaluation by said evaluation means matches the set conditions, a process for placing the data blocks in the storage physical device selected according to the conditions is executed.
2. A storage system comprising:
a storage sub-system including,
a plurality of storage physical devices;
means for controlling access to said plurality of storage physical devices;
at least one interface for returning a result of access to said storage physical devices according to an

an interface between a management device and
the sub-system;

said storage sub-system including evaluation means for, when access for a data storage request is issued from the host device, evaluating whether the request matches the preset policy; and

means for, when the result of evaluation by said evaluation means matches conditions for the policy, executing a process for placing the data blocks in the storage physical device selected by the policy.

3. The storage system as claimed in claim 1, further including means for relocating data blocks in the storage physical device based on the set conditions upon relocation of the stored data blocks.

a plurality of storage physical devices;

means for controlling access to said plurality of storage physical devices;

interface means provided between a host device and said storage physical devices;

means for setting at least one policy to said storage system, said policy being a policy set so as to select one of said plurality of storage physical devices for each data structure in one file according to the data structure of the file or attributes attached to the data structure where the data structure exists in the file upon storing said one file in said storage system as viewed from said host device; and

means for, when access for a file storage request is made from said host device, applying said preset policy to the file subjected to the storage request to thereby evaluate the result of application thereof;

wherein data blocks are placed in the corresponding storage physical device for each data structure, based on the result of evaluation.

5. The storage system as claimed in claim 4, wherein when information about a band/transmission rate necessary for reproduction exists as attributes included in a data structure provided for each object of each scene having multimedia data where the information about the band/transmission rate or the multimedia data is object-encoded when the file stored from said host device is of the multimedia data such as a moving picture and voice, a storage physical device for placing data blocks therein based on the band/transmission rate information set for each scene or for each object of each scene is selected

from said plurality of storage physical devices in said storage system as the policy set to the storage system.

6. The storage system as claimed in claim 1, further including means for storing management information for converting logic addresses accessed by said each host device into information for specifying the plurality of storage physical devices and physical addresses for the specified storage physical device, and preset conditions, wherein when an access request to each data block is made from said host device according to the corresponding logical address, the preset conditions are applied to the access request to thereby evaluate the application thereof, and when the result of evaluation matches the conditions, the management information about the logical addresses and the physical addresses for the storage physical devices both associated with one another is operated to thereby place data blocks in a desired storage physical device.

7. The storage system as claimed in claim 6, wherein when an access request to each data block is made from said host device according to the corresponding logical address, the preset conditions are applied to the access request to thereby evaluate the application thereof, and when the total number of data blocks placed in a storage physical device selected from the result of evaluation exceeds the full capacity of the storage physical device to be intended for storage, the data blocks are stored in other storage

physical device of said storage system or the data blocks already assigned to the storage physical device selected by the application of the conditions thereto are shifted to other storage physical device in the storage system, where the data blocks are stored in a free location thereof.

8. The storage system as claimed in claim 6, when an access request to each data block is made from said host device according to the corresponding logical address, the preset conditions are applied to the access request to thereby evaluate the application thereof, and when the total number data blocks placed in a storage physical device selected from the result of evaluation exceeds the full capacity of the storage physical device to be intended for storage or a preset threshold value, the storage system has the function of notifying information about surpassing of the storage physical device in capacity or notifying information about the conditions that led up to the selection of the storage physical device.

9. The storage system as claimed in claim 1, further including means for setting the conditions shared between the plurality of host devices when accessible from the plurality of host devices.